

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or.

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221 Effective 12/13/03: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORFD SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual cPAVE)
- U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
 Hand Carry directly to (EFFECTIVE 12/03/03):
- U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1803, Crystal Plaza Two. 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or-other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFW16

RAW SEQUENCE LISTING

DATE: 04/12/2004

PATENT APPLICATION: US/09/903,068B

TIME: 12:58:00

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\04122004\I903068B.raw

SEQUENCE LISTING

```
(1) GENERAL INFORMATION:
              (i) APPLICAŅT: MIYAZONO, Kohei
       5
                             TEN DIJKE, Peter
       6
                             FRANZEN, Petra
       7
                             YAMASHITA, Hidetoshi
      8
                             HELDIN, Carl-Henrik
             (ii) TITLE OF INVENTION: ACTIVIN RECEPTOR LIKE KINASES, PROTEINS
     10
     11
                                      HAVING SERINE THREONINE KINASE DOMAINS,
     12
                                      AND THEIR USE
     14
            (iii) NUMBER OF SEQUENCES: 48
            (iv) CORRESPONDENCE ADDRESS:
     17
                   (A) ADDRESSEE: Fulbright & Jaworski L.L.P.
     18
                   (B) STREET: 666 Fifth Avenue
     19
                   (C) CITY: New York City
     20
                   (D) STATE: New York
     21
                                                               Does Not Comply
                   (E) COUNTRY: USA
     22
                   (F) ZIP: 10103
                                                               Corrected Diskette Needed
     24
             (v) COMPUTER READABLE FORM:
     25
                   (A) MEDIUM TYPE: Diskette, 3.25 inch, 1.44mb
     26
                   (B) COMPUTER: IBM PS/2
     27
                  (C) OPERATING SYSTEM: PC-DOS
     28
                  (D) SOFTWARE: Wordperfect
     30
            (vi) CURRENT APPLICATION DATA:
C--> 35
                  (A) APPLICATION NUMBER: US/09/903,068B
C--> 36
                  (B) FILING DATE: 11-Jul-2001
     66
           (vii) PRIOR APPLICATION DATA:
     39
                  (A) APPLICATION NUMBER: PCT/GB93/02367
     40
                  (B) FILING DATE: November 17, 1993
     43
                  (A) APPLICATION NUMBER: GB 9224057.1
     44
                  (B) FILING DATE: November 17, 1992
    47
                  (A) APPLICATION NUMBER: GB 9304677.9
    48
                  (B) FILING DATE: March 8, 1993
    51
                  (A) APPLICATION NUMBER: GB 9304680.3
    52
                  (B) FILING DATE: March 8, 1993
    55
                  (A) APPLICATION NUMBER: 9311047.6
    56
                  (B) FILING DATE: May 28, 1993
    59
                  (A) APPLICATION NUMBER: 9313763.6
    60
                  (B) FILING DATE: July 2, 1993
    63
                  (A) APPLICATION NUMBER: 9316099.2
    64
                  (B) FILING DATE: August 3, 1993
    67
                 (A) APPLICATION NUMBER: 321344.5
    68
                 (B) FILING DATE: October 15, 1993
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RAW SEQUENCE LISTING

DATE: 04/12/2004

PATENT APPLICATION: US/09/903,068B

TIME: 12:58:00

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\04122004\1903068B.raw

```
70
     (viii) ATTORNEY/AGENT INFORMATION:
71
             (A) NAME: Norman D. Hanson
72
             (B) REGISTRATION NUMBER: 30,946
73
             (C) REFERENCE/DOCKET NUMBER: LUD 5298.4 DIV (10105901)
75
       (ix) TELECOMMUNICATION INFORMATION:
76
             (A) TELEPHONE: (212) 318-3000
             (B) TELEFAX: (212) 318-3400
```

ERRORED SEQUENCES

```
-Found 130
      2295 (2) INFORMATION FOR SEQ ID NO: 34:
              (i) SEQUENCE CHARACTERISTICS:
                     (A) LENGTH: (178) amino acids
      2297
                     (B) TYPE: 130 amino acid
      2298
      2299
                     (D) TOPOLOGY: linear
      2300
              (ii) MOLECULE TYPE: peptide
      2301
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34
     2302 Thr Arg Leu His Leu Cys His Cys Ser Arg Glu Val Gly Cys Asn Ala
                                               10
     2304 Arg Thr Thr Gly Trp Val Pro Gly Ile Glu Phe Leu Asn Glu Thr Asp
                      20
                                           25
     2306 Arg Ser Phe Tyr Glu Asn Thr Cys Tyr Thr Asp Gly Ser Cys Tyr Gln
                  35
                                       40
     2308 Ser Ala Arg Pro Ser Pro Glu Ile Ser His Phe Gly Cys Met Asp Glu
             50
                                  55
     2310 Lys Ser Val Thr Asp Glu Thr Glu Phe His Asp Thr Ala Ala Lys Val
                              70
                                                  75
     2312 Cys Thr Asn Asn Thr Lys Asp Pro His Ala Thr Val Trp Ile Cys Cys
     2313
     2314 Asp Lys Gly Asn Phe Cys Ala Asn Glu Thr Ile Ile His Leu Ala Pro
                                          105
                                                              110
     2316 Gly Pro Gln Gln Ser Ser Thr Trp Leu Ile Leu Thr Ile Leu Ala Leu
     2317
                                      120
     2318 Leu Thr
E--> 2319
             (130)
     2466 (2) INFORMATION FOR SEQ ID NO: 47:
              (i) SEQUENCE CHARACTERISTICS:
     2468
                    (A) LENGTH: 6 amino acids
     2469
                    (B) TYPE: amino acid
     2470
                    (D) TOPOLOGY: linear
     2471
              (ii) MOLECULE TYPE: peptide
     2472
              (v) FRAGMENT TYPE: internal
    2473
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:
E--> 2474 Xaa Pro Val (Art) Trp Thr
     2475
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VERIFICATION SUMMARY

DATE: 04/12/2004 PATENT APPLICATION: US/09/903,068B TIME: 12:58:03

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\04122004\1903068B.raw

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L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
 L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
 L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
 L:35 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vi)
 L:36 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
 L:88 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:284 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:493 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:712 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:912 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:1112 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:1306 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:1511 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:1709 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
 L:1903 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1916 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1929 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1942 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1955 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1968 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1981 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:2319 M:203 E: No. of Seq. differs, LENGTH:Input:178 Found:130 SEQ:34
L:2354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:2366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:2378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:2390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:2402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:2414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:2426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:2438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:2462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:2474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:2474 M:330 E: (2) Invalid Amino Acid Designator, 1
L:2486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
```

